

Amendments to the Claims

Please amend the claims as shown in the Listing of Claims below. This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (previously presented) An apparatus for continuous casting of metal billets comprising a horizontal casting mould having an inlet end and an outlet end, a feed trough for feeding molten metal to the mould inlet end, a horizontal conveyor for receiving a cast billet from the mould outlet end and a moveable cutting saw operable to move synchronously with the conveyor for cutting a continuous billet into lengths while traveling on said conveyor, wherein the horizontal conveyor comprises at least one resilient continuous V-shaped support positioned between the casting mould and the cutting saw.
2. (previously presented) An apparatus as claimed in claim 1 wherein the continuous V-shaped support comprises an endless belt.
3. (previously presented) An apparatus as claimed in claim 1 wherein the saw is a flying saw.
4. (previously presented) An apparatus as claimed in claim 3 wherein a further horizontal conveyor comprising at least one resilient V-shaped support, is located downstream from the flying saw.
5. (previously presented) An apparatus as claimed in claim 1 wherein the V-shaped support comprises a continuous V-shaped belt formed of a resilient material.
6. (previously presented) An apparatus as claimed in claim 1 wherein the V-shaped support comprises a series of resilient V-shaped supports mounted on a continuous metallic belt.

7. (previously presented) An apparatus as claimed in claim 1 wherein the V-shaped support comprises a series of metallic V-shaped supports mounted on a continuous resilient belt.
8. (previously presented) An apparatus as claimed in claim 1 wherein the V-shaped support includes a continuous belt having a continuous slot oriented longitudinally in the bottom face of the belt and adapted to travel on a fixed, low friction support contoured to match the contour of the slot.
9. (previously presented) An apparatus as claimed in claim 2 that includes a drive pulley with grooves for engaging the endless belt.
10. (previously presented) An apparatus as claimed in claim 9 wherein the endless belt is supported by at least one further pulley, with tensioning means between the pulleys.
11. (previously presented) An apparatus as claimed in claim 10 which includes a motor drive connected to said drive pulley.
12. (previously presented) An apparatus as claimed in claim 4 that includes means for synchronizing the speed of the conveyors upstream and downstream of the flying saw.
13. to 15. (Canceled)
16. (currently amended) An apparatus for continuous casting of metal billets comprising a horizontal casting mould, having an inlet end and an outlet end, a feed trough for feeding molten metal to the mould inlet end, a horizontal conveyor for receiving a cast billet from the mould outlet end and a moveable cutting saw operable to move synchronously with the conveyor for cutting a continuous billet into lengths while traveling on said conveyor, wherein the saw is a flying saw has a active drive means for advancing the rotating saw through the cast billet and a resistance load means adapted to provide a load counter to the direction of movement of the saw through the billet.
17. (previously presented) An apparatus as claimed in claim 16 wherein the resistance load means comprises a mechanical or gas spring.

18. (previously presented) An apparatus as claimed in claim 17 wherein the flying saw is mounted on a carriage moveable in the direction of travel of the billet and drive means is provided for moving the carriage at a predetermined speed relative to the speed of the conveyor upstream of the flying saw.

19. (previously presented) An apparatus as claimed in claim 18 wherein the resistance load means is adapted to dampen deceleration and acceleration of the rate of travel of the flying saw upon entering and exiting the billet.

20. (previously presented) A method for controlling the cut of a flying saw associated with a continuous casting machine, wherein the casting machine comprises a metal casting mould for casting a metal billet, an upstream billet conveying means between the mould and the saw, said saw being a rotary saw mounted on a frame, and a downstream billet conveying means downstream of the saw, the downstream conveying means moving at a speed synchronized to the speed of the upstream conveying means, said method for controlling the cut comprising the steps of:

- (a) moving the saw frame to position the saw at a predetermined position upstream of the position at which the cut is to be made,
- (b) accelerating the frame and saw so that they move at the same speed as the upstream conveying means,
- (c) rotating the saw and moving it perpendicular to the billet to cut through the billet,
- (d) upon completion of the cut, accelerating the downstream conveyor relative to the upstream conveyor,
- (e) accelerating the frame and saw relative to the upstream conveyor but less than the acceleration of the downstream conveyor,
- (f) after the cut faces of the billet have been separated by a predetermined amount, returning the saw to its original upstream position, halting the movement of the frame and returning it to its start position, and re-synchronizing the speed of the downstream conveying means relative to the upstream conveying means.